INDEX

Ablations, parietal, motor performance after, 248
Acetylcholine, effect on electrocorticogram, 131
Activity, electrical, of lateral geniculate, 308
Anesthesia, cyclopropane, brain potential changes, 33
Anesthesia, ocular rotation, 59
Anesthetic potency, cortical potentials and, 347
Area, cortical, repetitive phenomena of, 128
Atropine, effect on electrocorticogram, 131

Bailey, P., Dusser de Barenne, J. G., Garol, H. W., and McCulloch, W. S. Sensory cortex of chimpanzee, 469
—— and Sweet, W. H. Effects on respiration, blood pressure and gastric motility of stimulation of orbital surface of frontal lobe, 276
Barrera, S. E. See Pacella, B. L., 213
Barron, D. H. Central course of "recurrent" sensory discharges, 403
Bartley, S. H. See Heinbecker, P., 219
Beecher, H. K. Chemical constitution and anesthetic potency in relation to cortical potentials, 347
Behavior patterns, locomotor, integration of 323
Bishop, G. H., and O'Leary, J. S. Electrical activity of the lateral geniculate of cats following optic nerve stimuli, 308
Blair, E. A. See Erlanger, J., 74
Blood pressure, effect of frontal lobe on, 276
Blood sugar, cortical frequency spectrum, 49
Brain, choline esterase in, 396
potential changes in anesthesia, 33
Brickner, R. M. A human cortical area producing repetitive phenomena when stimulated, 128
Bromiley, R. B., and Brooks, C. McC. Rôle of neocortex in regulating postural reactions of the opossum (*Didelphys virginiana*), 339
Brooks, C. McC., and Peck, M. E. Effects of various cortical lesions on development of placing and hopping reactions in rats, 66
Brooks, C. McC. See Bromiley, R. B., 339

Campbell, B. H. Integration of locomotor behavior patterns of hagfish, 323
Chemical constitution, cortical potentials and, 347
Chimpanzee, sensory cortex, 469
movements of precentral gyrus, 442
Choline esterase, in brain of embryos, 396
in spinal cord of embryos, 396
CO_2, cortical frequency spectrum, 49
Collins, D. A. See Spiegel, E. A., 59
Contractions, visible, of forelimb musculature, 358
Corbin, K. B., and Harrison, F. Function of mesencephalic root of fifth cranial nerve, 423
Cord potentials, in spinal shock, 139, 146, 151
Cornea, sensory reception in, 486
Corpus callosum, cortical potential mediation, 414
intercortical connections, 407
Cortex, cerebral, sensory influence on, 388
sensory, of chimpanzee, 469
Cortical frequency spectrum, modification by blood sugar, CO_2, O_2, 49
Culler, E. A. See Smith, C. G., *et al.*, 182
Currents, sine wave, stimulation of precentral gyrus, 442
Curtis, H. J. An analysis of cortical potentials mediated by corpus callosum, 414
—— Intercortical connections of corpus callosum as indicated by evoked potentials, 407

Dusser de Barenne, J. G., 283
—— See Bailey, P., *et al.*, 469

Electrocorticogram, acetylcholine effect on, 131
atropine effect on, 131
eserine effect on, 131
Embryos, sheep, choline esterase of brain, 396
of spinal cord, 396
Erlanger, J., and Blair, E. A. Facilitation and difficilitation effected by nerve impulses in peripheral fibers, 107
Eserine, effect on electrocorticogram, 131
Ether, action on nervous system, 219

Fetus, rat, forelimb musculature, 458
Fibers, dorsal root, relayed impulses, 166
peripheral, difficilitation, 107
facilitation, 107
Forbes, A. See Renshaw, B., *et al.*, 74
—— See Therman, P. O., *et al.*, 191
Forebrain, rage reactions and, 538
Forelimb, musculature contractions, 358
Freeman, H. See Rubin, M. A., 33
Frontal lobe, stimulation of orbital surface, 276
Fulton, J. F., See Sahs, A. L.

Galambos, R. See Therman, P. O., *et al.*, 191

GAMMON, G. D. See LEWY, F. H., 388
Ganglion, superior cervical, electric response, 191
GANTT, W. H. See LÖWENBACH, H., 43
GAROL, H. W. See BAILEY, P., *et al.*, 469
Gastric motility, effect of frontal lobe, 276
Geniculate, lateral, electric activity, 308
GERARD, R. W. See SUGAR, O., 1
GIBBS, E. L. See GIBBS, F. A., *et al.*, 49
GIBBS, F. A., WILLIAMS, D., and GIBBS, E. L. Modification of the cortical frequency spectrum by changes in CO_2, blood sugar and O_2, 49
GIBSON, W. C. Degeneration and regeneration of sympathetic synapses, 237
Grasp in infants, 213
Gyrus, precentral, movements with sine wave currents, 442

HAERTIG, E. W., and MASSERMAN, J. H. Hypothalamic lesions and pneumonia in cats, 294
Hagfish, locomotor behavior patterns, 323
HARRISON, F. An attempt to produce sleep by diencephalic stimulation, 156
—— See CORBIN, K. B., 423
HIENBECKER, P., and BARTLEY, S. H. Action of ether and nembutal on the nervous system, 219
HEMINGWAY, A., RASMUSSEN, T., WIKOFF, H., and RASMUSSEN, A. T. Effects of heating hypothalamus of dogs by diathermy, 329
HINES, Marion. Movements elicited from precentral gyrus of adult chimpanzees by stimulation with sine wave currents, 442
HINSEY, J. C., and PHILLIPS, R. A. Observations upon diaphragmatic sensation, 175
Hippocampus, electrical studies, 74
HUGHES, J., McCOUCH, G. P., and STEWART W. B. Cord potentials in spinal shock—multiple volleys, 146
—— See McCOUCH, G. P. *et al.*, 151
—— See STEWART, W. B. *et al.*, 139
HURSH, J. B. Relayed impulses in ascending branches of dorsal root fibers, 166
Hypothalamus, heating in dogs, 329

Impulses, relayed, in dorsal root fibers, 166
Infants, grasp phenomena, 213
  postural reflexes, 213
Inhibition, paleocerebellar, 20
Intercortical connections, corpus callosum, 407
Iris, nerve impulses from, 486
Isocortex, electrical studies, 74

KENNARD, M. A., and KESSLER, M. M. Studies of motor performance after parietal ablations in monkeys, 248
KESSLER, M. M. See KENNARD, M. A., 248

Lens, nerve impulses from, 486
Lesions, cortical, effect on pupillary reactions, 201
  placing and hopping reactions, 66
  hypothalamic, pneumonia and, 293
  pyramidal, phasic and tonic movements and, 527
LEWY, F. H., and GAMMON, G. D. Influence of sensory systems on spontaneous activity of cerebral cortex, 388
Lobe, occipital, ocular movements, 353
LÖWENBACH, H., and GANTT, W. H. Conditioned vestibular reactions, 43

McCOUCH, G. P., STEWART, W. B., and HUGHES, J. Cord potentials in spinal shock—crossed effects in monkeys—*Macaca mulatta*, 151
—— See HUGHES, J., *et al.*, 146
—— See STEWART, W. B., *et al.*, 139
McCULLOCH, W. S. See BAILEY, P., *et al.*, 469
MASLAND, R. L., and WIGTON, R. S. Nerve activity accompanying fasciculation produced by prostigmin, 269
MASSERMAN, J. H. See HAERTIG, E. W., 293
METTLER, C. See METTLER, F. A., 527
METTLER, F. A., and METTLER, C. Conversion of phasic into tonic movements by pyramid lesions, 527
—— See SMITH, C. G., *et al.*, 182
MILLER, F. R., STAVRAKY, G. W., and WOONTON, G. A. Effects of eserine, acetylcholine and atropine on the electrocorticogram, 131
MILLER, H. R. See SPIEGEL, E. A., 538
Monkeys, cord potentials in spinal shock, 151
  ocular movements, 353
  parietal ablations in, 248
  spinal reflexes, autonomic, 258
  somatic, 258
MOORE, R. M. See SEYBOLD, W. D., 436
MORISON, B. R. See RENSHAW, B., *et al.*, 74
MORUZZI, G. Paleocerebellar inhibition of vasomotor and respiratory carotid sinus reflexes, 20
Motor performance, parietal ablations, 248
Movements, phasic, 527
  tonic, 527

NACHMANSOHN, D. Choline esterase in brain and spinal cord of sheep embryos, 396
Nembutal, action on nervous system, 219
Neocortex, regulation of postural reactions, 339
Nerve, activity, fasciculation by prostigmin, 269

Nerve (*cont.*)
centers, in *Sepia*, 501
learning from, 501
fifth cranial, mesencephalic root, 423
oculomotor, reflex dilatation, 436
optic, activity of lateral geniculate, 308
Nervous system, ether action on, 219
nembutal action on, 219

O_2, cortical frequency spectrum, 49
Ocular movements from occipital lobe, 353
rotation, in anesthesia, 59
supranuclear centers, 59
OLDBERG, E. See URY, B., 201
O'LEARY, J. S. See Bishop, G. H., 308
OPPENHEIMER, M. J. See SPIEGEL, E. A., 538

PACELLA, B. L., and BARRERA, S. E. Postural reflexes and grasp phenomena in infants, 213
Paleocerebellar inhibition, 20
PECK, M. E. See BROOKS, C. McC., 66
PHILLIPS, R. A. See HINSEY, J. C., 175
Pneumonia, hypothalamic lesions, 293
Potentials, cortical, anesthetic potency, 347
chemical constitution, 347
evoked, intercortical connections, 407
mediation by corpus callosum, 414
Progression movements, from subthalamic stimulation, 300
Prostigmin, nerve activity by, 269
Pupil, reflex dilatation, oculomotor nerve, 436

Rage reactions, forebrain and, 538
RASMUSSEN, A. T. See HEMINGWAY, A., *et al.*, 329
RASMUSSEN, T. See HEMINGWAY, A., *et al.*, 329
Reactions, conditioned vestibular, 43
placing and hopping, 66
postural, neocortex and, 339
pupillary, effect of cortical lesions, 201
Reflex pathways, spinal activity in, 378
Reflexes, autonomic, in spinal monkeys, 258
carotid sinus, inhibition of 20
postural, in infants, 213
somatic, in spinal monkeys, 258
RENSHAW, B. Activity in the simplest spinal reflex pathways, 373
—— FORBES, A., and MORISON, B. R. Activity of isocortex and hippocampus: Electrical studies with micro-electrodes, 74
Respiration, effect of frontal lobe, 276
Responses, electric, from superior cervical ganglion, 191
phasic, to cortical stimulation, 182
Root, mesencephalic, of Vth cranial nerve, 423
RUBIN, M. A., and FREEMAN, H. Brain potential changes in man during cyclopropane anesthesia, 33

SAHS, A. L., and FULTON, J. F. Somatic and autonomic reflexes in spinal monkeys, 258
SANDERS, F. K., and YOUNG, J. Z. Learning and other functions of higher nerve centres of *Sepia*, 501
Sclera, nerve impulses from, 486
Sensation, diaphragmatic, 175
Sensory discharges, "recurrent," 403
reception, in cornea, 486
system, influence on cerebral cortex, 388
SEYBOLD, W. D., and MOORE, R. M. Oculomotor nerve and reflex dilatation of pupil, 436
Sepia, learning from nerve centers, 501
Shock, spinal, cord potentials, 139, 146, 151
Sleep, by diencephalic stimulation, 156
SMITH, C. G., METTLER, F. A., and CULLER, E. A. The phasic response to cortical stimulation, 182
SPIEGEL, E. A., and COLLINS, D. A. Ocular rotation in anesthesia and under influence of supranuclear centers, 59
—— MILLER, H. R., and OPPENHEIMER, M. J. Forebrain and rage reactions, 538
Spinal cord, choline esterase in, 396
regeneration in rat, 1
STAVRAKY, G. W. See MILLER, F. R., *et al.*, 131
STEWART, W. B., HUGHES, J., and McCOUCH, G. P. Cord potentials in spinal shock—single volleys, 139
—— See HUGHES, J., *et al.*, 146
—— See McCOUCH, G. P., *et al.*, 151
Stimulation, cortical, phasic response to, 182
diencephalic, sleep by, 156
subthalamic, progression movements from, 300
Stimuli, optic nerve, activity of lateral geniculate after, 308
STRAUS, W. L., JR., and WEDDELL, G. Nature of first visible contractions of the forelimb musculature in rat fetuses, 358
SUGAR, O., and GERARD, R. W. Spinal cord regeneration in rat, 1
Supranuclear centers, anesthesia, 59
SWEET, W. H. See BAILEY, P., 276
Synapse, sympathetic, degeneration, 237
regeneration, 237

THERMAN, P. O., FORBES, A. and GALAMBOS, R. Electric responses derived from

1

4876
C613
D

JOURNAL OF NEUROPHYSIOLOGY